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(54) GALLIUM NITRIDE GROUP COMPOUND SEMICONDUCTOR LASER DIODE

(57)Abstract:

PURPOSE: To obtain a blue laser.

CONSTITUTION: A gallium nitride group compound semiconductor laser diode having, at least, one p-n junction where a p-layer 5 consisting of a gallium nitride group compound semiconductor showing the n-type conductivity ($(\text{Al}_x\text{Ga}_{1-x})\text{In}_{1-y}\text{N}_{0.0 \cdot x' \cdot 1.0 \cdot y' \cdot 1}$) and a p-type layer 5 consisting of a gallium nitride group compound semiconductor showing the p-type conductivity ($(\text{Al}_x\text{Ga}_{1-x})\text{In}_{1-y}\text{N}_{0.0 \cdot x' \cdot 1.0 \cdot y' \cdot 1}$) ($x=x'$ or $x \neq x'$, $y=y'$ or $y \neq y'$) are joined. Since it is succeeded to generate a gallium nitride group compound semiconductor

